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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/742,165	12/20/2000	G. Wyndham Hannaway	GWHA0001	9712

7590 03/22/2007
Kent A. Lembke
Hogan & Hartson L.L.P.
One Tabor Center
1200 Seventeenth Street, Suite 1500
Denver, CO 80202

EXAMINER

DOAN, DUYEN MY

ART UNIT	PAPER NUMBER
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2152

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/22/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	09/742,165	HANNAWAY, G. WYNDHAM	
	Examiner	Art Unit	
	Duyen M. Doan	2152	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 December 2006.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-15,17-20,22,23 and 25-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-15,17-20,22,23 and 25-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

Claims 1,3-15,17-20,22-23,25-30 are presented for examination. Claims 2,16,21,24 are cancelled.

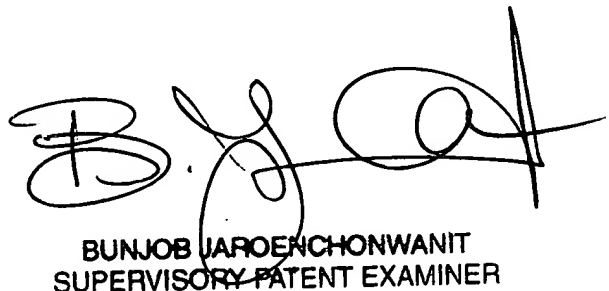
In view of the Appeal filed on 12/14/06, PROSECUTION IS HEREBY REOPENED. The new rejection set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed by an appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and appeal brief fee can be applied to the new appeal. If, however, the appeal fees set forth in 37 CFR 41.20 have been increased since they were previously paid, then appellant must pay the difference between the increased fees and the amount previously paid.

A Supervisory Patent Examiner (SPE) has approved of reopening prosecution by signing below:



BUNJOB JAROENCHONWANIT
SUPERVISORY PATENT EXAMINER

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1,3-5,8,11-15,17-18,20,22-23,25-30 rejected under 35 U.S.C. 103(a) as being unpatentable over Dean et al (us pat 5,914,757) (hereinafter Dean) in view of in view of Davies (us pat 7,143,749).

As regarding claim 1, Dean discloses an input interface adapted for linking to the communications network to receive a first and a second media stream, wherein the first and second media streams comprise a plurality of digital data packets being transmitted over the communications network from a first and a second media source, respectively (see Dean col.4, lines 6-22, the video come from two separate sources, also see figure 2, video source 161 and video source 162), and wherein the first and the second media streams each include a streaming video portion (see Dean col.4, lines 6-22, video sources); a first data buffer for storing the data packets of the first media stream (see Dean col.6, lines 27-62, also see figure.2, buffer 140A); a second data buffer for storing the data packets of the second media stream (see Dean col.6, lines 27-62, also see figure.2, buffer 140B); and a controller communicatively linked to the first and the second data buffers (see Dean col.4, lines 51-65, also see figure 2, mixer 150), wherein the controller is further configured for mixing the first and second time-adjusted streams into a composite media stream wherein the first and

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second time-adjusted streams are synchronized based on time (see Dean col.4, lines 51-65, also see figure 2, mixer 150).

Dean does not implicitly disclose selectively retrieving the data packets of the first and second media streams to form a first and a second time-adjusted stream, the controller determines a variable transmission delay for the first and the second media streams from the first and second media sources to the input interface and performs the selective retrieving based on the determined variable transmission delays, and the time-adjusted streams are synchronized based on time.

Davies teaches selectively retrieving the data packets of the first and second media streams to form a first and a second time-adjusted stream (see Davies col.4, lines 11-30, lines 45-63; col.15, lines 22-46, synchronize the time different of the first and second media), determines a variable transmission delay for the first and the second media streams from the first and second media sources to the input interface and performs the selective retrieving based on the determined variable transmission delays (see Davies col.4, lines 11-30, lines 45-63; col.15, lines 22-46, variable transmission delay), and the time-adjusted streams are synchronized based on time (see Davies col.4, lines 11-30, lines 45-63; col.15, lines 22-46).

It would have been obvious to one with ordinary skill in the art at the time the invention was made to combine the teaching of Davies to the system of Dean to synchronize and determine the transmission delay of the first and second media stream for the purpose of allow the system to produce the recognizable video images (see Dean col.5, lines 66-67).

As regarding claim 3, Dean-Davies discloses wherein the streaming video portion of the first media stream is compressed based on a first compression format and the

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second media stream is compressed based on a second compression format, the second compression format differing from the first compression format (see Dean col.10, lines 31-46)).

As regarding claim 4, Dean-Davies discloses including a decoding device between the input interface and the first and second data buffers for processing compressed first and second media streams into a first decoded stream and a second decoded stream, respectively, for storage in the first data buffer and the second data buffer, wherein the first decoded stream and the second decoded stream have compatible formatting (see Davies col.4, lines 11-22). The same motivation was utilized in claim 1 applied equally well to claim 4.

As regarding claim 5, Dean-Davies discloses wherein the controller forms the composite media stream by combining the first and the second time-adjusted streams such that the second time-adjusted stream has a first data packet positioned at a start time adjacent a last data packet of the first time-adjusted stream positioned at an end time (see Dean col.4, lines 51-65).

As regarding claim 8, Dean-Davies discloses a data parsing device in communication with the input interface configured for retrieving time data from the first and the second media streams and for transmitting the time data to the controller, wherein the controller uses the time data to determine variable transmission delays (see Davies col.4, lines 11-30, lines 45-63; col.15, lines 22-46). The same motivation was utilized in claim 1 applied equally well to claim 8.

As regarding claim 11, Dean-Davies discloses wherein the composite media stream comprises a streaming video portion having picture-in-picture or side by side portions formed with the data packets of the first and the second time-adjusted streams (see Dean col.4, lines 31-50).

As regarding claim 12, Dean-Davies discloses the controller combines the first media stream and second media stream in the composite media stream such that a data packet transmitted in the first media stream from the first media source at a transmission time is matched with a corresponding data packet in the second media stream transmitted from the second media source at the transmission time (see Dean col.4, lines 51-65).

As regarding claim 13, Dean-Davies discloses the combining is performed by the controller by selecting a transmission rate for the first and the second media streams to correct for the determined variable transmission delays see Davies col.4, lines 11-30, lines 45-63; col.15, lines 22-46). The same motivation was utilized in claim 1 applied equally well to claim 13.

As regarding claim 14, Dean-Davies discloses an output interface for transmitting the composite media stream from the controller over the communications network and including an end-user node linked to the communications network for receiving the composite media stream (see Davies col.2, lines 46-55)), wherein the end-user node comprises a synchronizer for determining a variable transmission delay between the controller (see Davies col.4, lines 11-63) and the end-user node and for performing time-based correction of the media stream to adjust for the variable

transmission delay (see Davies col.4, lines 11-63). The same motivation was utilized in claim 1 applied equally well to claim 14.

As regarding claim 15, Dean discloses an input interface linked to the communications network and configured for receiving a first and a second media stream transmitted by a first and a second media source, respectively (see Dean col.4, lines 6-22; col.6, lines 27-62), wherein the first media stream comprises a plurality of data packets of a video stream encoded to a first compression standard and the second media stream comprises a plurality of data packets of a video stream encoded to a second compression standard differing from the first compression standard (see Dean col.4, lines 6-22; col.6, lines 27-62); a decoder for decoding the first and the second media streams into a first and a second intermediate media stream (see Dean col.10, lines 31-46, also see figure 4, decoder 445, decoder 447), wherein the first and second intermediate streams are compatibly formatted (see Dean col.10, lines 31-46); a streaming media processor for mixing the first and the second intermediate-format media streams into a composite media stream encoded according to an output compression standard (see Dean col.4, lines 51-65);

Dean does not explicitly disclose a controller in communication with the input interface and the streaming media processor adapted for determining a variable transmission delay for the first and the second media streams based on a transmission time for a data packet of the first media stream and a time of receipt at the input interface of the data packet and on a transmission time for a data packet of the second media stream and a time of receipt at the input interface of the data packet.

Davies teaches determines a variable transmission delay for the first and the second media streams from the first and second media sources to the input interface and performs the selective retrieving based on the determined variable transmission delays (see Davies col.4, lines 11-30, lines 45-63; col.15, lines 22-46, variable transmission delay)

It would have been obvious to one with ordinary skill in the art at the time the invention was made to combine the teaching of Davies to the system of Dean to synchronize and determine the transmission delay of the first and second media stream for the purpose of allow the system to produce the recognizable video images (see Dean col.5, lines 66-67).

As regarding claims 17-18, the limitations are similar to the limitations of rejected claims 3-5,8,11-14, therefore reject for the same rationales as claims 3-5,8,11-14.

As regarding claim 20, Dean discloses receiving a first media stream comprising a plurality of data packets from one or more video files transmitted over the communications network by a first media source (see Dean col.4, lines 6-22, also see figure 2, media A 161); receiving a second media stream comprising a plurality of data packets from one or more video files transmitted over the communications network by a second media source (see Dean col.4, lines 6-22, also see figure 2, media B 162); creating a synchronized media stream by mixing the first and the second media streams, wherein the first and the second media streams are presented in the synchronized media stream concurrently (see Dean col.4, lines 51-65; col.6, lines 27-62).

Dean does not explicitly disclose retrieving timing data from the first and second media stream; comparing the timing data with a reference time to determine a first and

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a second transmission delay value adjusting the first and the second media streams to correct for the first and the second transmission delay values, wherein the adjusting includes matching the data packets of the first and the second media streams based on transmittal times from the first and the second media sources.

Davies teaches retrieving timing data from the first and second media stream; comparing the timing data with a reference time to determine a first and a second transmission delay value adjusting the first and the second media streams to correct for the first and the second transmission delay values, variable transmission delay (see Davies col.4, lines 11-30, lines 45-63; col.15, lines 22-46), wherein the adjusting includes matching the data packets of the first and the second media streams based on transmittal times from the first and the second media sources (see Davies col.4, lines 11-30, lines 45-63; col.15, lines 22-46).

It would have been obvious to one with ordinary skill in the art at the time the invention was made to combine the teaching of Davies to the system of Dean to synchronize and determine the transmission delay of the first and second media stream for the purpose of allow the system to produce the recognizable video images (see Dean col.5, lines 66-67).

As regarding claim 22-23, 25-26 the limitations are similar to the limitations of rejected claims 3-5,8,11-14, therefore reject for the same rationales as claims 3-5,8,11-14.

As regarding claim 27, Dean-Davies discloses the synchronized media stream concurrently provides two screens corresponding to each of the first and second media streams (see Dean col.6, lines 9-26).

As regarding claim 28, Dean-Davies discloses the two screens are arranged as split screens (see Dean col.6, lines 9-26).

As regarding claim 29, Dean-Davies discloses wherein the two screens are arranged as picture-in-picture with a first of the two screens provided within a second of the two screens (see Dean col.6, lines 9-26).

As regarding claim 30, Dean-Davies discloses wherein the first media stream comprises a first live webcast and the second media stream comprises a second live webcast (see Davies abstract, real time multimedia). The same motivation was utilized in claim 20 applied equally well to claim 30.

Claim 6-7,19 rejected under 35 U.S.C. 103(a) as being unpatentable over Dean and Davies as applied to claims 5,17 above, and further in view of Schuster et al (us pat 6,360,271).

As regarding claim 6, Dean-Davies discloses the invention substantially as claimed in claim 5 above, However Dean-Davies does not disclose the concept of using the external timing reference for receiving the reference time value and using that reference time value to process the multimedia.

Schuster teaches the concept of using the external timing reference for receiving the reference time value and using that reference time value to process the multimedia (see Schuster, col.7, lines 14-67; col.8, lines 17-56; col.12, lines 10-67).

It would have been obvious to one with ordinary skill in the art at the time the invention was made to combine the teaching of Schuster to the system of Dean-Davies to use the external timing reference for the purpose of improving and managing the real time media transmission over a network (see Schuster col.5, lines 3-6).

As regarding claim 7, Dean-Davies-Schuster discloses a length of the first media stream, compares the length with the end time and the variable network delay, computes an edit length for the first media stream, and compresses or lengthens the first media stream to form the first time-adjusted stream, whereby the last data packet coincides with the end time (see Dean col.15, lines 31-46).

As regarding claim 9, Dean-Davies discloses the invention substantially as claimed in claim 17 above, However Dean-Davies does not disclose the concept of using the external timing reference for receiving the reference time value and using that reference time value to process the multimedia.

Schuster teaches the concept of using the external timing reference for receiving the reference time value and using that reference time value to process the multimedia (see Schuster, col.7, lines 14-67; col.8, lines 17-56; col.12, lines 10-67).

It would have been obvious to one with ordinary skill in the art at the time the invention was made to combine the teaching of Schuster to the system of Dean-Davies to

use the external timing reference for the purpose of improving and managing the real time media transmission over a network (see Schuster col.5, lines 3-6).

Claims 9-10 rejected under 35 U.S.C. 103(a) as being unpatentable over Dean Davies and Schuster as applied to claim 6 above, and further in view of Bustini et al (us pat 5,313,454) (hereinafter Bus).

As regarding claim 9, Dean-Davies-Schuster discloses the invention substantially as claimed in claim 17 above, However Dean-Davies-Schuster does not disclose the controller is adapted to create media server control signals based on the determined variable transmission delays and to transmit the signals over the communications network to the first and the second media sources to control transmission variables of the first and second media streams.

Bus discloses the concept of creating a feed back control signal based on the determined delay (see Bus col.22, lines 27-67).

It would have been obvious to one with ordinary skill in the art at the time the invention was made to combine the teaching of Bus to the system of Dean-Davies-Schuster to create a control signal and feed back to the sources for the purpose of dynamically allocating the bandwidth and controlling congestion in the network (see Bus col.4, lines 42-67).

As regarding claim 10, Dean-Davies-Schuster-Bus discloses the transmission variables are selected from the group consisting of transmission timing, transmission

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rate, and transmission length (see Schuster col.12, lines 10-55). The same motivation was utilized in claim 6 applied equally well to claim 10.

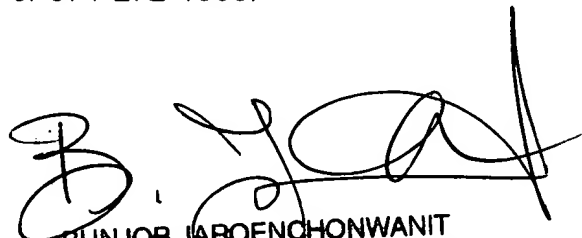
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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Duyen M. Doan whose telephone number is (571) 272-4226. The examiner can normally be reached on 9:30am-6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bunjob Jaroenchonwanit can be reached on (571) 272-3913. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Examiner
Duyen Doan
Art unit 2152


BUNJOB JAROENCHONWANIT
SUPERVISORY PATENT EXAMINER